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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,997	08/12/2002	Takao Taniguchi	AW-C216	9038

7590 02/07/2005  
Lorusso & Loud  
3137 Mount Vernone Avenue  
Alexandria, VA 22305

EXAMINER

SHAKERI, HADI

ART UNIT PAPER NUMBER

3723

DATE MAILED: 02/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b>	<b>Application No.</b> 10/088,997	<b>Applicant(s)</b> TANIGUCHI ET AL.	
	<b>Examiner</b> Hadi Shakeri	<b>Art Unit</b> 3723	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 02 February 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
- Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) a set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The reply was filed after the date of filing a Notice of Appeal, but prior to the date of filing an appeal brief. The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

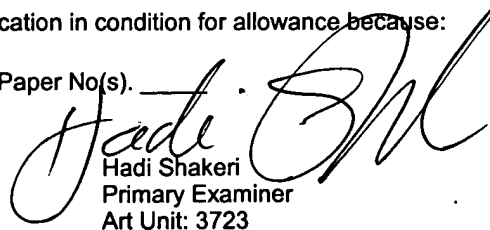
3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ They raise the issue of new matter (see NOTE below);
- (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.
- NOTE: amending independent claims 25, 44 and 45 changes the scope of all the dependent claims 27-43 and 46-48, in view of arguments, e.g., page 17, section 7. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
- The status of the claim(s) is (or will be) as follows:
- Claim(s) allowed: None.
- Claim(s) objected to: 27.
- Claim(s) rejected: 25 and 27-48.
- Claim(s) withdrawn from consideration: \_\_\_\_\_.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: \_\_\_\_\_.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_.
13. ☐ Other: \_\_\_\_\_.

  
 Hadi Shakeri  
 Primary Examiner  
 Art Unit: 3723

***Response to Arguments***

1. See 37 CFR 1.193(a)(2) which provides for the inclusion of the proposed rejection(s) detailed below in the Examiner's Answer if applicant elects to file an appeal to the Board of Patent Appeals and Interferences in this proceeding. To be complete, such rejection(s) must be addressed in any brief on appeal.

Upon appeal and entry of the amendment:

Claims 25, 27, 31-33, 35-37 and 43 would be rejected for the reasons set forth in **section 2** of the final Office Action mailed 08/25/04.

Claims 28, 29, 34 and 38 would be rejected for the reasons set forth in **section 3** of the final Office Action mailed 08/25/04.

Claim 30 would be rejected for the reasons set forth in **section 4** of the final Office Action mailed 08/25/04.

Claim 44 would be rejected for the reasons set forth in **section 5** of the final Office Action mailed 08/25/04.

Claims 39-42 would be rejected for the reasons set forth in **section 6** of the final Office Action mailed 08/25/04.

Claims 45-48 would be rejected for the reasons set forth in **section 7** of the final Office Action mailed 08/25/04.

2. Applicant's arguments filed 12/27/04 have been fully considered but they are not persuasive.

The argument that claim 49 was not rejected and thus the inclusion of claim 49 in the independent claim 25 renders the rejection of claims 25, 27, 31-33, 35-37 and 43 moot is not persuasive, since as clearly indicated in the previous Office Action mailed on

08/25/04, claim 49 and claim 50 were objected for failing to further limit the parent claims. The Applicant in REMARKS submitted with the proposed amendment acknowledges this objection. Further Applicant does not argue that claims 49 and 50 do not add additional limitations to the parent claims, accordingly the rejections of the claims 25, 27, 31-33, 35-37 and 43 over prior art of record is still maintained.

The argument that both references, i.e., Hosoya and Praeg et al are both purely mechanical process does not exclude them as prior art so long as the steps recited are met. The step of oxidizing the tooth surface by supplying, without abrasive grain, water or an aqueous solution is met, by machining, lubricating or processing oil containing water. The base reference Hosoya does clearly indicate the use of machining oil without abrasive (07:54-55). It does not in any way exclude using oil containing water. The argument that Hosoya teaches anti-corrosive "atmosphere" with reference to 07:20-21, and that this applies to using machining oil not having water is not persuasive. The reference in col. 7, lines 20 and 21 are directed to an air bearing for reciprocating motion of member 211 supported in a floating manner to the receiver 230 of the members 210 and 215 wherein high reduction of friction is desired between the sliding parts, and since compressed air is used in the air bearing, Hosoya discloses mixing it with oil for lubrication and anticorrosion. Hosoya does not explicitly or implicitly teach away from using working liquid having water in the meshing gears.

Regarding non-ferrous applications, it is noted that claims do not recite language limiting the material used.

In response to applicant's argument that Praeg et al uses the coolant to carry away the particles, it is noted the step recited, e.g., oxidizing, is met, the fact that applicant has recognized another advantage which would flow naturally from following

the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

With regards to claim 27, as indicated in the previous office action, the language does not set forth a positive step in the method claim, and the invention as recited in claim 27 is met. It is also noted that indication of language failing to further limit for being narrative...does not mean that the attempted limitations were ignored, just that it does not patentably further limit the invention.

The argument regarding claims 32-35, e.g., dual motion, is not persuasive, attention is directed to Hosoya 02:1-3, or 03:1-25.

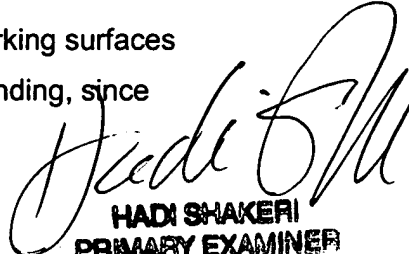
In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., non-ferrous) are not recited in the rejected claim(s).

The argument regarding claim 34, is not persuasive, since as indicated in Hosoya col. 5, lines 12-30, the position and angle of workpieces should be adjusted according with the type of gears, as indicated in the previous office action, "dependent of workpiece parameters". For example, type.

The argument regarding claim 30, i.e., that using acid, peroxide, chloride to provide wear resistance is totally unsupported, unsupportable, and erroneous; attention is directed to the teaching reference, Igrashi et al., col. 2, lines 14-21.

The argument regarding diamond grains is not persuasive, since Hosoya discloses that diamond may be used to improve finishing, see col. 3, lines 30-33.

Finally it is noted that water based working liquid applied to the working surfaces of the meshing gears would produce mechano-chemical action without grinding, since Hosoya discloses not using abrasives in the working liquid.

  
HADI SHAKERI  
PRIMARY EXAMINER